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## WHAT IS CLAIMED IS:

- 1. A control unit for an electric power steering apparatus that controls a motor for giving steering assist force to a steering mechanism based on a current control value calculated from a steering assist command value calculated based on the steering torque generated in the steering shaft, and a current value of the motor, wherein the control unit comprises a current dither signal generating unit for generating a current dither signal when the motor angular velocity is within a predetermined range of an angular speed  $\omega$ , and for adding the current dither signal to the steering assist command value.
- 2. The control unit for an electric power steering apparatus according to Claim 1, wherein the predetermined value is the angular velocity  $\omega$  of the motor corresponding to the static friction.
- 3. The control unit for an electric power steering apparatus according to Claim 2, wherein the current dither signal is expressed as K  $\cdot$  sin $\omega$ <sub>o</sub>t, where K is a constant and  $\omega$ <sub>o</sub> represents a dither angular frequency.
- 4. The control unit for an electric power steering apparatus according to Claim 3, wherein the dither angular frequency  $\omega_{\rm o}$  is a range of 30-50 Hz.
- 5. The control unit for an electric power steering apparatus

according to Claim 4, wherein the dither angular frequency  $\omega_{\text{o}}$  is 40 Hz.

6. The control unit for an electric power steering apparatus according to Claim 1, wherein the angular velocity  $\omega$  is obtained at a motor angular velocity estimating section which inputs a motor terminal voltage and a motor current.